



Eye Care Options

Story by Carol Cummings
Photos by Francis Gardler

EYE examinations are an important part of routine health care. Comprehensive ocular exams check for the possibility of cataracts, glaucoma, congenital eye problems, retinal and macular degeneration, and corneal problems. Regular examinations are essential for catching potential problems and treating them before they become serious problems.

Dr. (CPT) Patricia Allen, chief of optometry at Kimbrough Ambulatory Care Center, Fort Meade, Md., said healthy people should have an eye exam every two years until age 50, unless they have a medical history of high blood pressure or diabetes or if they're experiencing vision changes. After age 50 eye exams should be a yearly event.

Glaucoma

Glaucoma is one of the leading causes of blindness in the United States

and is a major concern for Army eye doctors. The disease damages the optic nerve. The condition is related to a buildup of pressure inside the eye, although some people with glaucoma have normal pressure readings.

"It is estimated that 3 million people in the United States have glaucoma, with 300,000 new cases per year," said Dr. (CPT)

Christine Watson, assistant chief of optometry at Kimbrough.

The most common type of glaucoma usually develops gradually and painlessly, without warning signs or symptoms. It affects peripheral

(side) vision first, and people can lose a great deal of vision before they realize anything is wrong.

Anyone can develop the disease, but people over 40 years old, blacks, diabetics, very nearsighted people and those with a family history of glaucoma are at greatest risk, Watson said.

Unfortunately, glaucoma cannot be prevented and vision lost to its progression cannot be restored. However, if early treatment to lower eye pressure is

SPC Adrian Quille models a pair of test frames that allow optometrists to select proper lenses for patients.

initiated, vision loss can be minimized. Treatment usually involves prescription eye drops and medicines. Laser procedures or surgery may also be required.

The best defense against glaucoma is to have a yearly eye health and vision examination. This should include a tonometry test to measure pressure inside the eye, a field-of-vision test and an evaluation of the optic nerve through dilated pupils, Watson said.

Persons experiencing blurred vision, loss of peripheral vision, seeing colored rings or halos around lights, or pain or redness in the eyes should schedule an examination immediately, Watson said.

Laser Surgery

Though laser surgery is one method of treating glaucoma, soldiers have become increasingly interested in cosmetic refractive surgery, commonly called "laser surgery," Allen said.

Refractive surgery usually lessens a person's dependence on corrective lenses by decreasing the eye's refractive error.

These errors occur when light rays



Carol Cummings and Francis Gardler work for the Fort Meade, Md., newspaper "Soundoff." The American Forces Information Service provided additional information for this story.



CPT Patricia Allen, an optometrist assigned to Fort Meade's optometry clinic, uses a photopter to check a patient's eyesight during a vision examination.

entering the eye do not focus properly on the retina due to mismatches in the power of the cornea, lens and the length of the eye. There are three basic types of refractive errors: myopia (nearsightedness), hyperopia (farsightedness) and astigmatism (blurred vision).

Every kind of refractive surgery procedure changes the curvature of the cornea, thereby correcting the refractive error. Some procedures are more precise than others, and safety is also an issue.

Until recently, cosmetic refractive surgery was not an option for members of the armed forces. However, a new Department of Defense policy now allows individuals who have had either of two common forms of laser eye surgery to enter the military with a medical waiver. The two procedures are photorefractive keratectomy, usually referred to as PRK, and laser-assisted in-situ keratomileusis, or LASIK, said Dr.



A soldier gets his eyes checked by a visual field analyzer at the Fort Meade clinic.

John Mazzuchi, deputy for clinical and program policy in the Office of the Assistant Secretary of Defense for Health Affairs.

Walter Reed Army Medical Center is performing the surgery for qualifying family members and retirees. The cost for a LASIK procedure is approximately \$2,800 to treat both eyes. The cost of a PRK procedure is approxi-

mately \$2,200. There is an eight-month waiting list for the procedures.

Allen cautions that such surgery is not for everyone.

"It's an irreversible procedure," he said. "It's good for the right person. But it doesn't work for everyone.

"You have to understand that you may not see 20/20 after the surgery. There are sometimes problems associated with it. And if you're over 40 years old, you'll probably still need to wear glasses to read," she said. "Also, some people who have had the surgery experience problems with corneal glare at night," especially those who've had an earlier form of eye surgery known as radial keratotomy, which is not approved for military members.

LASIK surgery is a relatively new procedure recently approved by the Food and Drug Administration. It involves making an incision through the outermost layer of the cornea to make a flap, then using a laser to reshape the central layers before closing the flap.

PRK was FDA-approved in 1995 to correct limited amounts of nearsightedness. It also uses a laser to vaporize a certain amount of the cornea to correct for the refractive error. The dangers include corneal hazing, infection and over- or under-correction.

DOD is reviewing studies that address issues surrounding laser eye surgery because they may become readiness concerns, Mazzuchi said. The department wants to know, for example, whether a patient's vision remains stable over time and whether rigorous activity may be detrimental to those who've had LASIK or PRK. □

Types of Services

MANY military installations have both optometry and ophthalmology clinics, but soldiers may not understand the difference between the two specialties.

Doctors of optometry are state-licensed health-care professionals who diagnose and treat eye health and vision problems

and detect related systematic conditions. They prescribe glasses, contact lenses, low-vision rehabilitation, vision therapy and medications as needed. Optometrists can also counsel patients regarding surgical alternatives and vision needs as related to their occupations, avocations and lifestyles.

Ophthalmologists are physicians who are licensed by a state regulatory board to

provide specialized medical and surgical care of the eyes and visual system. They primarily provide secondary and tertiary eye care, including the treatment of eye diseases, trauma and ocular manifestations of systemic diseases, and they perform eye surgery. They can also provide vision services such as glasses and contact lenses. — *Carol Cummings*